in prescribing multiple drug classes may improve care for men with substantial storage symptoms that have not been adequately addressed by α-blocker monotherapy.

PUK5
EVALUATING THE ECONOMIC IMPLICATIONS OF NONADHERENCE AND ANTIBODY-MEDIATED REJECTION IN RENAL TRANSPLANT RECIPIENTS: THE ROLE OF ONCE-DAILY, PROLONGED-RELEASE TACROLIMUS IN THE UK SETTING
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OBJECTIVES: While short-term kidney graft survival has gradually improved over time, improvements in long-term graft survival have been more modest. One key clinical factor limiting improved long-term outcomes is antibody-mediated rejection (AbMR). Recent data suggest that AbMR incidence is higher in non-adherent patients; a factor that can be improved by reducing pill burden. The aim of the present study was to model the incidence and economic consequences of graft loss and AbMR with once-daily, prolonged-release (PR) tacrolimus versus twice-daily, immediate-release (IR) tacrolimus in the UK setting. **METHODS:** A combined decision tree and Markov model was developed to estimate incidence of graft failure, AbMR and mortality in renal transplant recipients taking PR versus IR tacrolimus. Underlying rates of graft failure and mortality were derived from UK-specific sources. Proportions of patients adherent to once- and twice-daily tacrolimus were taken from a recent randomized trial. Relative risks of graft failure and AbMR were taken from a separate prospective analysis of 315 patients. Cost data were taken from the British National Formulary and NHS reference costs and reported in 2014 pounds sterling. **RESULTS:** Switching patients from IR to PR tacrolimus would result in projected cost savings of GBP 4,862 per patient over five years, translating to savings of GBP 486,200 in a hypothetical 100-patient cohort. Mean absolute per-patient costs with PR tacrolimus were projected to be GBP 40,974 versus GBP 45,836 with IR, with the largest saving arising from reduced dialysis costs, followed by reduced pharmacy and AbMR treatment costs. **CONCLUSIONS:** Modeling analysis showed that using PR tacrolimus in place of IR in UK renal transplant recipients was associated with lower pharmacy, dialysis and AbMR treatment costs, with the reduction in AbMR and dialysis costs being driven by improved adherence to PR tacrolimus and the consequent reductions in graft loss and onset of AbMR.

PUK6
ECONOMIC BURDEN OF ANTIBODY MEDIATED REJECTION FOLLOWING KIDNEY TRANSPLANTATION: COMPARATIVE ANALYSIS USING THE PREMIER HOSPITAL DATABASE
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OBJECTIVES: Antibody mediated rejection (AMR) is a major cause of graft failure following kidney transplantation (KTx). No agents are currently approved for prevention or management of AMR. Current strategies include plasmapheresis (PP) and intravenous immunoglobulin. Economic burden of AMR in the real-world clinical setting has not been studied. **METHODS:** Eligible patients (age ≥ 18 years) had a record of a hospitalization in the Premier database between January, 2006 and December, 2013 and were recipients of a kidney-only transplant. We used the occurrence of PP up to 90 days post-transplant as an indicator of AMR. A propensity score-matched cohort of No AMR, having at least 2 outpatient follow up visits within 90 days post-KTx without evidence of PP, was used for comparative analyses. Total number of days in the hospital and total hospital costs (US dollars) aggregated over the hospital visits were compared between matched cohorts using a gamma log link regression model. Model-based (mean) estimates are reported for AMR versus No AMR. **RESULTS:** A total of n=215 patients with AMR (mean age was 47 ± 14 years, 51% were male, 45% were recipients of a living donor, 19% had a previous KTx and 15% had a history of diabetes) were matched to n=215 No AMR patients. Mean total number of days in the hospital for the AMR cohort was 20 days compared to 11 days for the No AMR cohort ($p<0.0001$). Total hospital costs were 50% higher in the AMR cohort compared to the No AMR cohort (Mean = $135,172 versus $90,527, respectively; $p<0.0001$), irrespective of donor type (AMR match cohort X Donor type (living or deceased donor) interaction: $p=0.748$). **CONCLUSIONS:** AMR is associated with significant economic challenges early post-KTx and is costly to the healthcare system. Therapies targeted at preventing and treating AMR have important economic and clinical implications.

PUK7
ECONOMIC BURDEN OF HYPERPHOSPHATEMIA IN CHRONIC KIDNEY DISEASE IN CHINA: A REVIEW
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OBJECTIVES: Hyperphosphatemia in chronic kidney disease is a common complication in patients with end-stage renal. This paper reviews the researches which were done for China's current economic burden of hyperphosphatemia in chronic kidney disease. **METHODS:** Using "chronic kidney disease", "hyperphosphatemia in chronic kidney disease" and "economic burden" are as the key words to choose articles in PUBMED and Chinese journals. At the same time, the data of dialysis patients with CKD stages in 2012 from Beijing, Shanghai, Chengdu, Guangzhou and the databases of national urban basic medical insurance in 2010 are analyzed. **RESULTS:** Economic burden of chronic kidney disease in patients with hyperphosphatemia is divided into direct and indirect costs. The direct economic burden includes dialysis treatment and hospital costs, drug costs and cardiovascular complications' costs. Among them, dialysis treatment and hospital costs (including drug costs), per capita annual economic burden in hemodialysis patients was CNY159722, in patients with peritoneal dialysis for CNY96739; In CKD patients, the presence of acute onset of CVD events, no acute CVD events and patients without CVD showed that the medical costs for three groups of median were CNY38211.9 (11 685.1~73 358.7), ll061.4 (3 809.0 ~ 23 241.0) and 13678.7 (456.5 ~36 995.3).The indirect economic burden included loss of time and property in patients because of illness. In hemodialysis patients, per capita annual indirect costs were CNY27531.2. In peritoneal dialysis patients, per capita annual indirect costs were CNY96739.6. **CONCLUSIONS:** Economic Burden of chronic kidney disease patients with hyperphosphatemia is "catastrophic expenses" for the vast majority of the patient's families. In order to protect the interests of patients, health insurance in China needs to constantly change the protection's structures, improve the ability of insurance and expand the range of coverage.

PUK8
USE OF A FRENCH CLAIMS DATABASE TO ESTIMATE REAL-WORLD TREATMENT COSTS OF BENIGN PROSTATIC HYPERPLASIA
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OBJECTIVES: In France, health insurance coverage is mandatory for all individuals. Administrative information necessary for the reimbursement of healthcare costs by French National Health Insurance is recorded in the Vitale Card that patients use in every step of their care. Since 2013 this information is available in claims database including for each patient the comprehensive history of his/her health care expenditures. This database can be accessed alone or through a linkage to an electronic medical record database. The objective of this study was to evaluate the usefulness of this newly accessible information in assessing treatment cost of Benign Prostatic Hyperplasia (BPH) **METHODS:** Patients with a first prescription of BPH treatment and enrolled 1 year pre-/post index, were identified in a primary care electronic medical record database (CSD longitudinal patients database). Patients' characteristics and medical history were analyzed. Healthcare costs, exclusively related to BPH, were retrieved from the Health Economic Analysis Database and evaluated according to healthcare services: 1) Drugs delivered, both for BPH and for urinary tract infection, 2) Visits to physicians, 3) Laboratory and radiological exams, 4) medical and surgical procedures, 5) Hospitalizations. All health expenses were assessed from the payer's perspective **RESULTS:** A total of 16 893 patients were identified of whom 4 315 (24.5%) were treated with phytotherapeutic and 12758 (75.5%) with allopathic treatments. Median age was 66 years, they had been diagnosed for less than 1 year (0.87 year), 45.9% had hypertension, 31.6% had dyslipidemia and 16.3% had type 2 diabetes. Total cost HBP treatment was averagely about Euros 450 per patients/ per year. **CONCLUSIONS:** Estimating costs related to therapies is an increasingly mandatory exercise for pharmaceutical companies. The combination of EMR and claims allows a relevant and accurate analysis of health care costs from the payer' point of view.

PUK9
"COST OF ILLNESS" ANALYSIS OF CHRONIC KIDNEY DISEASE IN THE ENTIRE POPULATION OF THE RUSSIAN FEDERATION
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OBJECTIVES: To conduct the "cost of illness" analysis of chronic kidney disease (CKD) based on the entire population of the Russian Federation. **METHODS:** Information retrieval was in the public domain. Pharmacoeconomic analysis method "cost of illness" was used. Direct and indirect cost analysis was also performed. **RESULTS:** Analysis of found epidemiological data revealed that, in fact, in the Russian Federation the only available epidemiological information is on the later stages of CKD (accompanied by the appointment of renal replacement therapy). Based on that during "cost of illness" analysis at the population level we have extrapolated data on the distribution of patients by stage of CKD available in the article Lori A. et al. 2011. Then the cost of various stages of CKD (including direct and indirect costs) per patient was calculated. At the final stage the economic burden of CKD on the entire patient population in the Russian Federation was determined. The total cost for all patients with CKD who are in stages with I to V in the year were: CKD I – 1157758914 $, CKD II – 1348201542 $, CKD III – 2622796532 $, CKD IV – 218480559 $, CKD V (not receiving renal replacement therapy) – 890038600 $, CKD V (on hemodialysis) - 462938674 $, CKD V (on peritoneal dialysis) - 50407252 $, CKD V (exposed of the kidney transplant) - 79916759 $. Thus, the total economic burden of all stages of CKD in country scale was 6830521313 $ per year (1 $ = 66,0983). **CONCLUSIONS:** "Cost of illness" analysis showed the economic burden of CKD on the entire patient population of the Russian Federation and found that the major portion of the cost appears in the early stages of CKD.

PUK10
COST OF ILLNESS AND THE FACTORS AFFECTING IT IN THE PATIENTS OF CHRONIC KIDNEY DISEASE AT A PUBLIC TERTIARY CARE HOSPITAL
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OBJECTIVES: Cost unaffordability is one of the major reasons for the deprived quality of life and increased mortality in chronic kidney disease (CKD) patients especially in patients on dialysis. However, very limited data is available on CKD cost of illness (COI). This study was carried out to estimate the cost of illness in the patients of CKD. **METHODS:** This cross sectional study was carried at a renal clinic of a tertiary care hospital over a period of six months. COI was estimated as the sum of the direct and indirect cost involved. Direct cost was divided into direct medical and direct non-medical cost. Direct medical cost included the acquisition cost and ancillary cost. Direct non-medical cost included the cost of transportation & food. Indirect cost included the loss of productivity as a result of absence from work by patients and care givers. Five stages of CKD patients were divided into two groups (G1-G4, and G5), according to KDIGO guidelines. Costs were estimated in terms of Indian national rupee (INR; IUSD~INR62). **RESULTS:** A total of 122 patients were included in the